

In the Specification:

Please replace the paragraph beginning on page 1, line 5, and ending on page 1, line 15, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

--The present invention relates to a metal coordination compound, an electrical device using the metal coordination compound and a display apparatus using the device. More specifically, the present invention relates to an organic metal coordination compound having formula (1) appearing hereinafter as a luminescence material so as to allow high luminance for a long period of time, an organic luminescence device using the metal coordination compound and a display apparatus including the luminescence device.--

Please replace the paragraph beginning on page 2, line 17, and ending on page 2, line 25, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

--The luminescence layer 12 may be formed of, e.g., an aluminum quinolinol complex (representative example thereof may include Alq3 described hereinafter) having an electron transporting characteristic and a luminescent characteristic. The hole transport layer 13 may be formed of, e.g., biphenyldiamine derivative (representative example thereof may include α -NPD described hereinafter) having an electron donating characteristic.--

Please replace the paragraph beginning on page 4, line 2, and ending on page 4, line 12, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

--On the other hand, different from the above fluorescence (luminescence) via a singlet exciton, phosphorescence (luminescence) via a triplet exciton has been studied for use in an organic EL device as described in, e.g., "Improved energy transfer in electrophosphorescent device" (D. F. O'Brien et al., Applied Physics Letters, Vol. 74, No. 3, pp. 442-444 (1999)) and "Very high-efficiency green organic light-emitting devices based on electrophosphorescence" (M. A. Baldo et al., Applied Physics Letters, Vol. 75, No. 1, pp. 4-6 (1999)).--

Please replace the paragraphs beginning on page 7, line 12, and ending on page 8, line 9, with the following paragraphs. A marked-up copy of the original paragraphs, showing the changes made thereto, is attached.

A³
--The use of phosphorescence based on the transition from the triplet excited state has also been proposed in, e.g., Japanese Laid-Open Patent Application (JP-A) 11-329739, JP-A 11-256148 and JP-A 8-319482.

However, the above-mentioned organic EL devices utilizing phosphorescence experience problems such as a lower luminescence efficiency and stability thereof (luminescent deterioration), particularly in an energized state.

The reason for luminescent deterioration has not been clarified as yet but may be attributable to such a phenomenon that the life of a triplet exciton is generally longer than that of a singlet exciton by at least three digits, so that a molecule is placed in a higher-energy state for a long period to cause a reaction with ambient substance, formation of an exciplex or excimer, a change in the minute molecular structure, a structural change of the ambient substance, etc.

Accordingly, the (electro)phosphorescence EL device is expected to provide a higher luminescence efficiency as described above, while the EL device is required to

A4 suppress or minimize the luminescent deterioration in an energized state affecting the life of the EL device---

Please replace the paragraph beginning on page 18, line 11, and ending on page 18, line 19, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

A5 --After the reaction, the reaction mixture was cooled and subjected to extraction with cool water and ethyl acetate. The organic layer was washed with water, followed by distilling-off of the solvent under reduced pressure, to obtain a residue. The residue was purified by silica gel column chromatography (eluent: toluene/THF (tetrahydrofuran)=10/1) to obtain 86.9 g of liquid 2-methyl-2-hydroxy-4-(2-pyridyl)-3-buthine (Yield: 80.6%).--

Please replace the paragraph beginning on page 34, line 21, and ending on page 35, line 4, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

A6 --Then, on the organic lamination layer 23, a metal electrode 24 comprising a 10 nm-thick Al-Li alloy layer (Li: 1.3 wt. %) and a 150 nm-thick Al layer (disposed on the Al-Li alloy layer) was formed by vacuum deposition (2.7×10^{-3} Pa (= 2×10^{-5} Torr)) with a mask, followed by patterning in a stripe form comprising 100 lines (each having a width of 100 μm and a spacing of 40 μm) arranged to intersect the ITO stripe electrode lines at right angles, thus forming an organic EL device having a matrix of pixels (100 x100 pixels).--

Please replace the paragraph beginning on page 35, line 21, and ending on page 36, line 6, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

A7

--When the organic luminescence device of the present invention is used as a light source for a printer, for example, the organic luminescence device is formed in a line form and disposed in proximity to a photosensitive drum, thus allowing independent drive of respective device elements as a line shutter to effect desired exposure to the photosensitive drum. Further, when the organic luminescence device of the present invention is used as an illumination device or a back light for a liquid crystal display apparatus, compared with the case of an ordinary fluorescent lamp, the organic luminescence device is expected to exhibit an excellent energy saving effect.--

Please replace the paragraph beginning on page 36, line 14, and ending on page 37, line 3, with the following paragraph. A marked-up copy of the original paragraph, showing the changes made thereto, is attached.

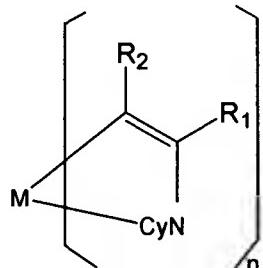
A8

--As described above, according to the present invention, it is possible to provide a metal coordination compound of formula (1) exhibiting a higher phosphorescence yield and a shorter phosphorescence life (time) and allowing control of a maximum luminescence wavelength based on a combination of a chain alkene group and an N-containing cyclic group (CyN). When the metal coordination compound of formula (1) is used as an organic (compound) layer of an organic luminescence device, the resultant organic luminescence device exhibits not only a high-efficiency luminescence but also a high luminance for a long period of time while suppressing a deterioration in luminescence in energized state. Further, it becomes possible to provide an image forming apparatus using the organic luminescence device as a display device.--

Please replace the Abstract with the following. A marked-up copy of the original Abstract, showing the changes made thereto, is attached.

A 9

--A metal coordination compound suitable as an organic material for a luminescent device is represented by the following formula (1):

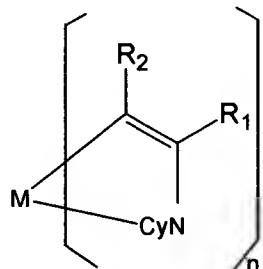


(1).--

In the Claims:

Please amend claims 1-8 to read as follows. A marked-up copy of claims 1-8, showing the changes made thereto, is attached.

1. (Amended) A metal coordination compound represented by formula (1):



(1),

wherein M denotes Ir, Pt, Rh or Pd; n is 2 or 3; R₁ and R₂ independently denote a hydrogen atom or a linear or branched alkyl group having 1 - 20 carbon atoms optionally including one or at least two non-neighboring methylene groups which can be replaced with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH- or -C≡C- and [optionally] including hydrogen atom which can be replaced with fluorine atom; and CyN denotes a cyclic group containing nitrogen atom connected to M and optionally having a substituent selected from the group consisting of halogen atom, nitro group, phenyl group, trialkylsilyl group having 1 - 8 carbon atoms, and a linear or branched alkyl group having 1 - 20 carbon atoms optionally including one or at least two non-neighboring methylene groups which